L 17871-63
ACCESSION NR: AP3003707   6

for most of the components.7   Tests with a spectrometer having a resolution of
0.4% showed that the regulator provides adequate current stabilization. The char-
acteristics of the regulator are: current range: 200 mA to 15 amp; drift over a
period of one hour 1 in 6 x 10^4; current change as a result of 10% line voltage
rise: under 1 in 2 x 10^3; ripple at 6 amp: under 1 in 1.5 x 10^4. Orig. art. has:
4 formulas and 6 figures.

ASSOCIATION: none

SUBMITTED: 00   DATE ACQ: 02Aug63   ENCL: 00

SUB CODE: GE, SD   NO REF SOV: 002   OTHER: 0000

Card 2/2

GORDINA, R.V.; ZAKHAROVA, M.S.; OSTROUKHOVA, D.I.; KURAGINA, R.V.; KORASHEVICH,
V.P.

Epidemiological effectiveness of pertussis-diphtheria-tetanus
vaccination. Zhur.mikrobiol.,epid.i immun. 40 no.12:9-13 D '63.
(MIRA 17:12)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR
i Sanitarno-epidemiologicheskoy stantsii Krasnodarskogo i Stavropol'-
skogo krayev.

GORDINA, R.V.; ZAKHAROVA, M.S.; OSTROUKHOVA, D.I.; KURAGINA, R.V.

Data on the reactogenicity of pertussis-diptheria-tetanus vaccine.
Zhur. mikrobiol., epid. i immun. 40 no.9.14-18 S'63.

(MIRA 17:5)

1. Penzenskaya krayevaya sanitarno-epidemiologicheskaya stantsiya.

KURAGINA, R. V.

"Current Tasks of Microbiological Sci entific Research Institutes in the
Field of Research and Production of Bacterial Preparations," Zhur. Mikrobiol.,
Epidemiol. i Immunobiol., No. 8, 1954

KURAGINA,R.V.

Variability of Corynebacterium diphtheriae following treatment with antibiotics. Zhur. mikrobiol. epid. i immun. no.1:61-65 Ja '55.

(MLRA 8:2)

1. Iz otdela detskikh infektsiy (zav. Z.I.Galunina) Gor'kovskogo nauchno-issledovatel'skogo instituta vaktsin i syvorotok (dir. A.A. Golubev, nauchnyy rukovoditel' prof. F.T.Grinbaum)

(CORYNEBACTERIUM DIPHTHERIAE, effect of drugs on, antibiotics)
(ANTIBIOTICS, effects, on Corynebacterium diphtheriae)

Translation M-1065, 13 Apr 56

FAZEKAS, Gyula, I.; RENGEI, Bela; HARMATH, Ferenc; KURAI, Janos.

Determination of ether concentration in blood and in organs by
Widmark's method after lethal ether anesthesia in animal
experiments. Kisérletes orvostud. 8 no.1:22-33 1956.

1. Szegedi Orvostudomanyi Egyetem Igazsagugyi Orvostani
Intezete.
    (ETHYL ETHER
        concentration in body fluids & organs after lethal
        anesth. in animal exper., determ. by Widmark's method,
        results (Hun))
    (BODY FLUIDS
        ether concentration, determ. after lethal anesth. in
        animal exper., results (Hun))
    (ANESTHESIA, INHALATION
        ether, lethal, determ. of ether concentration in body
        fluids & organs after death in animal exper. (Hun))

KURAI, Janos, dr.

Hypertrophic gastritis simulating a tumor in roentgenographic examination. Magy radiol. 13 no.6:356-359 N '61.

1. Szegedi Orvostudomanyi Egyetem Rontgen Klinikajanak kozlemenye Igazgato: Szenes Tibor dr. egyetemi tanar.

(GASTRITIS radiog)   (STOMACH neopl)

KURAI, Janos, dr.

Gastric polyp simulating duodenal tumor. Magy radiol. 14 no.1:45-47
Ja '62.

1. Szegedi Orvostudomanyi Egyotom Rontgon Klinikajanak kozlemenye.
(Igazgato: Szenes Tibor dr. egyetemi tanar)

(STOMACH NEOPLASMS radiog)   (DUODENUM neopl)
(POLYPI radiog)

KURAI, Janos, dr.

Local hypertrichosis in sarcoma of the femur. Magy. radiol. 14 no.2:
110-112 Mr '62.

1. Szegedi Orvostudomanyi Egyetem Rontgen Klinikajanak kozlemenye.
Igazgato: Szenes Tibor dr. egyetemi tanar.

(FEMUR neopl)   (SARCOMA case reports)
(HYPERTRICHOSIS etiol)

KURAI, Janos, dr.

Abdominal aortic aneurysm perforated into the duodenum. Magy. radiol.
14 no.3:151-153 Je '62.

1. A Szegedi Orvostudomanyi Egyetem Rontgen Klinikajanak (igazgato:
dr. Szenes Tibor egyetemi tanar) kozlemenye.

(DUODENUM dis)   (AORTIC ANEURYSM compl)

DOCTOR

Nucre radiologia, no. 4, 1974, 148 159

ANNOTATION: Oroshdazi Varosi Tanacs Korhaza Rontgen Osztalyanak

HUNGARY

KURAI, Janos, Dr; City Council of Oroshaza, Hospital, Radiology (Oroshazai Varosi Tanacs Korhaz, Rontgenosztaly).

"Diverticulosis of the Bulbus."

Budapest, Magyar Radiologia, Vol XIX, No 1, Feb 67, pages 42-44.

Abstract: [Author's English summary modified] In the case reported, involving post-bulbar ulcer which penetrated into the pancreas, diverticulosis of the bulbus and of the duodenum   was   observed by the author. 2 Hungarian, 6 Western references.

1/1

KURAKAYA, V. P.

"The Problem of the Rational Distribution of the Meteorological Network of Third Class Stations," Trudy OGO, No 4 (66), 1947.

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L 18858-63   EWT(1)/FCC(w)/BDS   AFFTC/ASD/IJP(C)

ACCESSION NR: AT3002108   S/2910/61/001/01-/0101/0117

AUTHORS: Bolotin, A.B., Gensayte, Ye.B., Kurakevich, V.A.

TITLE: Application of two-center functions in calculations of biatomic molecules

SOURCE: AN Lit SSR. Litovskiy fizicheskiy sbornik. v.1, no.1-2, 1961, 101-117

TOPIC TAGS: wave function, single-electron wave function, two-center wave function, Schroedinger equation, biatomic, molecule, ion, H, hydrogen

ABSTRACT: This theoretical paper deals with the two-center single-electron wave functions which have been obtained by others as the result of a solution of the Schroedinger equation for the positive ion of the Hydrogen molecule. The primary task of this paper is an application of the Bates functions (Bates, D.R., et al., Roy. Soc., Proc., v. A234, 1956, 207) to the calculation of biatomic molecules for the case when the wave function of the system is constructed in the form of determinants, consisting of said functions, on the premise that a single type of equivalent electrons exists. The effective charge is determined from the condition of minimum energy of the system. The general equation is obtained for the energy of a molecule in the form of a sum of integrals of the elliptical coordinates, λ,

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L 18858-63
ACCESSION NR: AT3002108 O

which can be calculated by numerical integration; in a particular case, they are
reduced to tabulated integrals. All ultimate equations appear in two forms: The
first affords a possibility of employing Bates' tables, recomputed for suitable
values of the effective charge, wherein the matrix element of the interaction
operator of the electrons is determined by numerical integration. The second
affords a possibility of reducing all integrals of the theory to the tabulated ones;
the full employment of the Bates tables, of course, is thereby excluded. With
further reference to the two possible methods for the calculation of biatomic
molecules with identical nuclei by means of the two-center functions, it is noted
that the first of them, that is, the method employing the tables of the parameters,
the energy, and the coefficients of the Bates wave functions, conceives of the
energy of a system rationally in the form of the sum of the energy of the electrons
relative to the nucleus and the energy of interaction between the electrons. The
first term of this sum can be calculated with the aid of Bates' tables as recomputed
for suitable values of the effective charge (see above). The second term of the sum
is found by numerical integration. Consequently, for the calculations undertaken,
it is advisable to tabulate the integrals in terms of which the matrix elements of
the interaction operator between equivalent and nonequivalent electrons can be
expressed. The second method, in which the effective charge is varied for speci-
fied R and 2σ in integers, leads to the integrals tabulated by M. Kotani et al.,

Card   2/3

L 18858-63

ACCESSION NR: AT3002108

Phys. Mat. Soc. Japan, Proc., v. 20, extra no. 1, 1938. This variant eliminates the employment of the Bates tables for the parameters and for the energy. The maximum accuracy of this method does not exceed the accuracy of the graphs employed. The first variant can achieve almost any desired degree of accuracy. "The authors express their cordial gratitude to M. G. Veselov and M. I. Petrashen' for their attention and valuable advices proffered in the course of this work. The authors also thank A. P. Yutsis, N. D. Sokolov, and I. B. Levinson for comments and observations on the work." Orig. art. has 90 numbered formulas.

ASSOCIATION: Vil'nyusskiy gosudarstvenny*y universitet imeni V. Kapsuka-sa (Vilnyus State University)

SUBMITTED: 03Nov60   DATE ACQ: 23Apr63   ENCL: 00

SUB CODE: PH, MM   NO REF SOV: 001   OTHER: 008

Card 3/3

KURAKHTANOV, D.D.; KHAYRUTDINOV, R.M.; POZNYAKOV, M.V.

Efficient use of scrap for the purpose of lowering residual impurities in the metal. Stal' 25 no.7:616-618 Jl '65.   (MIRA 18:7)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.

ZAVOLOKIN, A.K. (Moskva); KURAKHTANOV, G.I. (Moskva)

Design of a volt-to-digit converter. Avtom.i telem. 21
no.6:902-906 Je '60.   (MIRA 13:7)
            (Pulse techniques(Electronics))

KURAKHTANOV M. A.

USSR/Physiology of Plants. Mineral Nutrition   I-2

Abs Jour   : Ref Zhur-Biologiya, No 2, 1958, 5633

Author   : M. A. Kurakhtanov and L. M. Garmash
Inst   : Moscow Agricultural Academy imeni K. A.
               Timiryazev
Title   : Effect of Ammonium and Nitrate Nitrogen on Phos-
               phorus Nutrition of Oats and Barley Plants

Orig Pub   : Dokl. Mosk. s-kh. akad. in K. A. Timiryazeva,
               1956, vyp. 22, 332-339

Abstract   : Nitrogen fertilizers on a base of different do-
               ses of P were introduced into water cultures
               containing the Gel'rigel's nutritive mixture.
               Plants containing N from an ammonium source were
               found to have absorbed relatively more P than
               those with N from a nitrate source. With an ammo-
               nium source of N as compared with a nitrate

Card 1/2

Abstract   : source, increased doses of P had a negative
               effect on the yields of oats and barley, while
               small doses had a negative effect on the yields
               of oats, but had no effect at all on the yields
               of barley. Large doses of K somewhat weakened
               the negative effect of ammonium N on the growth
               of the plant. A rise in the level of phosphate
               nutrition with an increase in mineral phospho-
               rus caused a rise in the content of organo-
               phosphorus compounds in the plants, particu-
               larly of nucleoproteides, phytin, and sugar
               phosphates.

Card 2/2

KURAKHTANOV, Vladimir Mikhaylovich; PETROV, L., red.; NOGINA, N.,
tekhn.red.

[First Printed Cotton Fabric Factory] Pervaia sittsenabivnaia.
Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1960. 141 p.
(MIRA 14:2)

(Moscow—Textile industry)

KURAKIN, A.

Sound recording device for 16-mm flms for the use of amateurs.
Radio no.7:41-42 Jl'55.   (MLRA 8:10)
     (Sound--Recording and reproducing)

KURAKIN, A.

Combined shots with the AK-8 motion-picture camera. Sov. foto 18
no.5:62-65 My '58.　　　　　　　　　　　　　　　　　(MIRA 11:5)
　　　　　　　　　　　　　　(Cinematography)

KURAKIN, A.

Special types of photography with the camera AK-8. Sov. foto 18
no. 7:58-61 Jl '58.   (MIRA 11:8)
                    (Cameras)

KURAKIN, A.

Printing a motion-picture film positive. Sov.foto 18 no.11:
62-64 N '58.   (MIRA 11:12)
            (Motion-picture photography--Films)

KURAKIN, A.F.

Altai Economic Administrative Region and problems of its development.
Izv. AN SSSR. Ser. geog. no.6:38-46 N-D '60.   (MIRA 13:10)

1. Permskiy gosudarstvennyy universitet im. A.M. Gor'kogo.
          (Altai Territory—Economic policy)

KURAKIN, A.F.

Expansion of the textile industry in the Altai Territory. Tekst.
prom.21 no.1:10-11 '60.   (MIRA 14:3)
            (Altai Territory—Textile industry)

KURAKIN, A.F.

Natural salts of Kulunda. Priroda 49 no. 12:61-62 D '60.
(MIRA 13:12)

1. Permskiy gosudarstvennyy universitet im. M.Gor'kogo.
(Kulunda steppe--Salts)

KURAKIN, A. F., Cand. Geogr. Sci.   (diss) "Role of Chemical In-
dustry in the Formation of the Altay Territorial-Production Com-
plex," Perm', 1961, 18 pp (Rostov State Univ.) 150 copies (KL
Supp 12-61, 257).

KURAKIN, A.F. (Perm')

Prospects of the development and distribution of the chemical
industry of the R.S.F.S.R. Geog.v shkole 24 no.6:13-17 N-D
'61.   (MIRA 14:10)

(Chemical industries)

SVISTKOVA, A.M.; KURAKIN, A.F.

Vladimir Il'ich Lenin on Siberia. Geog. v shkole 25 no.2:2-5
Mr-Ap '62.   (MIRA 15:2)
(Lenin, Vladimir Il'ich, 1870-1924)
(Siberia--Economic conditions)

KURAKIN, A.F.

"Political map of the world; 1900-1960" by A.G.Shiger. Reviewed
by A.F.Kurakin. Geog. v shkole 25 no.2:91 Mr-Ap '62.

(MIRA 15:2)

(Maps) (Shiger, A.G.)

KURAKIN, A.F.

Dyes of the Altai Territory. Priroda 51 no.4:94 Ap '62.
(MIRA 15:4)

1. Permskiy gosudarstvennyy universitet im. A.M.Gor'kogo.
(Altai Territory--Pigments)

KURAKIN, Anatoliy Fedorovich; LUFYNIN, Leonid Aleksandrovich;
MALKOV, Il'ya Yefimovich; YEL'KOV, F., red.; ZHDANOVA, G.,
tekhn. red.

[Development of the chemical industry of the Altai] Raz-
vitie khimicheskoi promyshlennosti na Altae. Barnaul,
Altaiskoe knizhnoe izd-vo, 1962. 83 p. (MIRA 16:12)
        (Altai Territory—Chemical industries)

KURAKIN, A.F.

Economic administrative regions, their specialization and comprehensive development. Izv. AN SSSR. Ser. geog. no.4:43-51 Jl-Ag '62.
(MIRA 16:5)

1. Permskiy gosudarstvennyy universitet.
(Economic zoning)

GORKIN, A.F.

Formation of the Altai economic complex and its development
in the seven-year plan. Izv. Alt. god. Geog ....a SSSR
no.1;11-20 '61.   (MIRA 17;5)

SEIFON, Yakub; Richard, A.n.

Some problems in the development of the woodworking industry in the Altai Territory. Izv. Alt. otd. Geog. ob-va SSSR no.5: 197-199 '65.   (MIRA 18.12)

1. Barnaul'y gosudarstvennyy universitet.

KURAKIN, A.F.

Prerequisites and conditions of developing the paint industry
in the Altai. Uch. zap. Perm. gos. un. 23 no.4:45-48 '63.
(MIRA 17:10)

KURAKIN, A. T.

"Determining the Sign of the Charge of Primary Particles of Cosmic Rays by Measuring the Azimuth Asymmetry in the Stratosphere in the Region of the Equator," Dokl. AN 68, No 2, 1949   Acad. of Sci.

Moscow State Univer. x Inst. of Phys. im. P. N. LEBEDEV,

(illegible text)

ACCESSION NR: AP4047425

... of the diffusion was studied ...

... of a cladding process. Orig. art. has: 3 figures.

the Al-Si alloy 2 and 6μ thick. After being vacuum-annealed, the specimens were studied
structural, and electron diffraction analysis. The x-ray study

electron diffraction. It was found that the reaction

ACC NR: AT6006479   SOURCE CODE: UR/2690/65/000/024/0124/0130

AUTHORS: Layner, D. I.; Kurakin, A. K.

ORG: State Scientific Research and Design Institute of Alloys and Nonferrous Metalworking, Moscow (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut splavov i obrabotki tsvetnykh metallov)

TITLE: The reaction diffusion of iron into aluminum

SOURCE: Moscow. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut splavov i obrabotki tsvetnykh metallov. Trudy, no. 24, 1965. Metallovedeniye i obrabotka tsvetnykh metallov i splavov (Metal science and the treatment of nonferrous metals and alloys), 124-130

TOPIC TAGS: aluminum, iron, aluminum compound, intermetallic compound/ AV000 aluminum, Armco Airon

ABSTRACT: This investigation was undertaken to resolve the present controversy concerning the nature of the compounds formed in the solid state diffusion of iron into aluminum. Electron and x-ray diffraction spectra of bimetallic specimens consisting of Armco A iron and high purity aluminum AV000 were investigated. The aluminum coating of the specimens was of sufficient thickness (2 and 6 μ) to yield a characteristic aluminum x-ray pattern, as suggested by M. M. Umanskiy and M. P. Shaskol'skaya (ZhTF, 1964, vyp. 11, t. 14, str. 1283--1290). The experimental results

Card 1/3

L 24432-66

ACC NR: AT6006479

are presented in graphs and tables (see Fig. 1). It was found that the solid state diffusion of iron into aluminum begins at 350C and gives rise to the formation of the compound $FeAl_3$. At higher temperatures (up to 400C) Fe_2Al_5 is formed, and at 650C the formation of FeAl takes place.
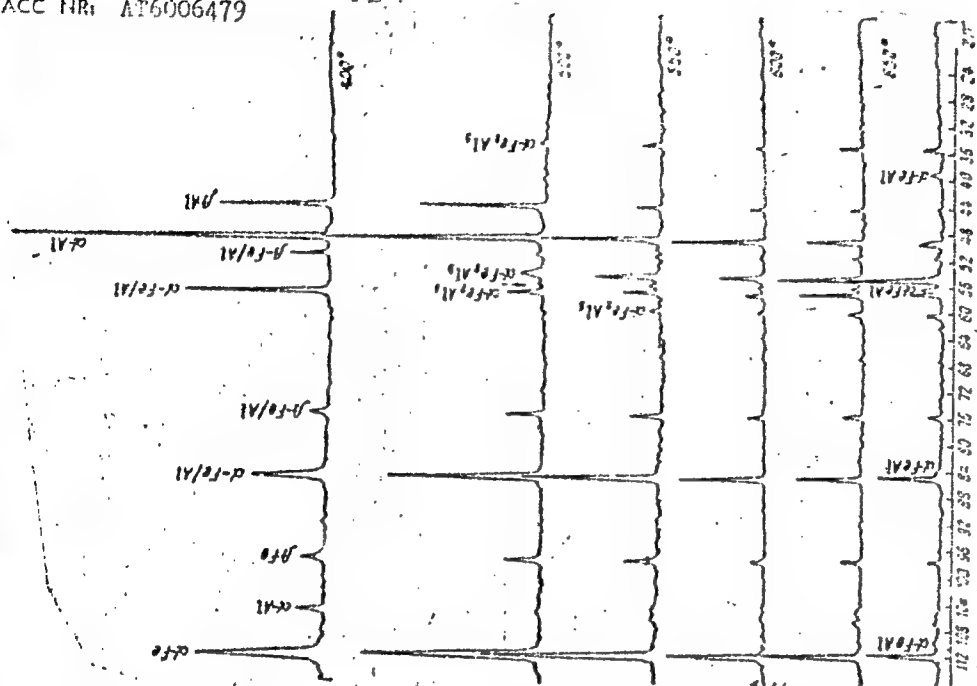
Card 2/3 .

ACC NR: AT6006479

Fig. 1. X-ray diffraction spectra of bimetallic specimens, annealed at different temperatures for a period of 30 minutes.

Orig. art. has: 3 tables and 2 graphs.
Card 3/3   SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 005

L 24416-66 EWT(m)/EWA(d)/T/EWP(t) IJP(c) JD/HW/JH

ACC NR: AT6006480 SOURCE CODE: UR/2680/65/000/024/0131/0138

AUTHORS: Layner, D. I.; Kurakin, A. K.

ORG: State Scientific Research and Design Institute of Alloys and Nonferrous Metalworking, Moscow (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut splavov i obrabotki tsvetnykh metallov)

TITLE: The influence of the copper content in aluminum on the diffusion of nickel into aluminum

SOURCE: Moscow. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut splavov i obrabotki tsvetnykh metallov. Trudy, no. 24, 1965. Metallovedeniye i obrabotka tsvetnykh metallov i splavov (Metal science and the treatment of non-ferrous metals and alloys), 131-138

TOPIC TAGS: nickel, aluminum, copper, nickel compound, aluminum plating/ AV000 aluminum

ABSTRACT: It was the object of this investigation to extend previously published work of D. I. Layner and A. K. Kurakin (FMM, vyp. 1, 1964, t. 18, str. 145-148) and, in particular, to determine whether complex ternary compounds of nickel-copper-

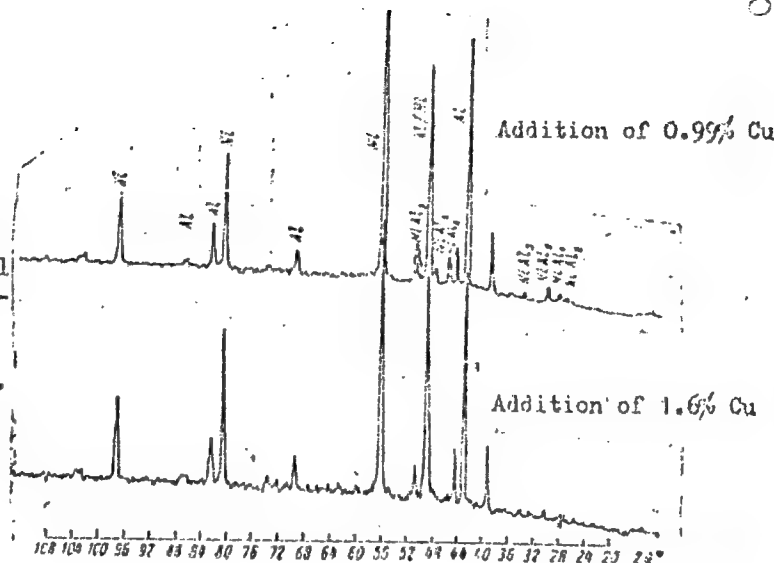Card 1/3

L 24436-66
ACC NR: AT6006480

aluminum are formed at the aluminum-nickel interface of aluminum-clad nickel speci-
mens, and also whether the formation of such compounds prevents the diffusion of
nickel into aluminum. A number of specimens with aluminum coating containing from
0.99 to 4.08% copper was investigated. The diffusion was studied in the tempera-
ture range of 400 to 650C. The specimens were exposed to the various temperatures
for a period of 30 minutes. After annealing, the nickel-aluminum interface of the
specimens was subjected to microscopic and x-ray analysis. The experimental results
are presented graphically (see Fig. 1). It was found that annealing of aluminum-
clad specimens with aluminum coating containing $\sim 2\%$ Cu leads to the formation of
a thin coating of the ternary compound Cu_3NiAl_6 at the nickel-aluminum interface of
the specimens. It is suggested that the formation of such an interfacial coating
should retard or prevent the diffusion of nickel into aluminum and thus prevent the
deterioration of the aluminum coating of the specimens.

Card 2/3

L 24424-65
ACC NR: AT6006480

Fig. 1. X-ray diffraction
spectra of bimetallic nickel
-aluminum specimens contain-
ing 0.99% and 1.6% copper
respectively. Annealing
temperature 450C for 30 min.

Addition of 0.99% Cu

Addition of 1.6% Cu

Orig. art. has: 6 graphs.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 005
Card 3/3

KURAKIN, A. N.

A. N. Kurakin, To obtain N, N-dimethyl-aniline-m-sulfo-acid. n. 2089.

Some methods of obtaining di-methyl-aniline-m-sulfo-acid are studied.
After sulfonation of di-methyl-aniline with fuming sulfuric acid, a mixture
of meta- and para-sulfo-acids are obtained. A method is given for the separa-
tion of isomeric sulfo-acids based on the difference in solubilities of their
calcium-salt.

Lab. of Organic Chemistry of the
Ivanov Chemico-Technological Inst.
August 9, 1947

KURAKIN, A. N.

E. A. Shilov and A. N. Kurakin. On the theory of sulfonation of aromatic amines. p. 2092.

It is shown that the hypothesis by Alexander dealing with the mechanism of sulfonation of aromatic amines is based on inaccurate data in the literature. Some considerations concerning the actual course of the reaction of sulfonation are discussed.

Lab. of Organic Chemistry of the
Ivanov Chemico-Technological Inst.
August 7, 1947.

SO: J. Gen. Chem. (USSR) 28, (80) No. 12, 1948

KURAKIN, A. N.

Kurakin, A. N.

"The Kinetics and the Mechanism of Iodization of Certain Aromatic Amino-
sulfonic Acids." Min Higher Education USSR. Ivanovo Chemicotechnological
inst. Ivanovo, 1954. (Dissertation for the Degree of Candidate in Chem-
ical Sciences)

So: Knizhnaya letopis', No. 27, 2 July 1955

AUTHOR: Kurakin, A. N. and Shilov, Ye. A.   73-1-7/26

TITLE: Kinetics and Mechanism of the Iodination of Aromatic
         Amino-Sulphonic Acids in Aqueous Solutions. (Kinetika
         i Mekhanizm Iodirovaniya Aromaticheskikh Aminosul'fo-
         kislot v Vodnykh Rastvorakh.)

ABSTRACT: The authors first give a short review of previously
         published work (Refs. 1 - 6). They claim that their own
         observations and experiments substantially supplement the
         theory of iodination of armotic compounds. In particular
         they found that not only the iodine cation but also
         elemental iodine can be of great importance as an
         iodination agent in aqueous solutions. Simpler aminobenze-
         nesulphonic acids were selected for this experiment because
         they are easily soluble in water. It is shown that the
         simplest aniline-m-sulphonic acid iodinates extremely
         slowly. The 4 aminosulphonic acids (referred to herein-
         after as E-acids) were: N,N-dimethylaniline-meta- and
         parasulphonic acids, N,N-diethylaniline-m-sulphonic acid
         and N-ethyl-N-phenyl-benzylamino-p-sulphonic acid. They
         were used in the form of their sodium salts. The whole

Card 1/4

73-1-7/26

Kinetics and Mechanism of the Iodination of Aromatic Amino-
Sulphonic Acids in Aqueous Solutions.

work is subdivided into the following sub-sections:
Compounds, methods of kinetic investigations, preliminary
observations on reaction conditions of the iodination of
aminosulphonic acids, symbols, salt effect during the
iodination of dimethylaniline-meta-sulphonic acid,
conclusions of the kinetic equations, values of the H-ion
and hypoiodous acid in the iodination kinetics of the
above acid, Further the values of concentration of the
iodine-anion in the kinetics of iodination of dimethyl-
aniline-m-sulphonic acid ion, the dependence of the
reaction velocity on the initial iodine concentration,
the coefficients of the kinetic equations of iodination
of the above compound at 25^0 C, the kinetics of iodination
of diethylaniline-m-sulphonic acid and of iodination of
dimethylsulphanilate-ions, the kinetics of iodination of
E-salts. Temperature coefficients and reaction parameters
of iodination and the relative activity of reagents in the
reaction mechanism of iodination are also discussed.
These investigations were carried out in the presence as
well as in the absence of buffer salts. Only free acids
are suitable. The general kinetic formula of iodination

Card 2/4

73-1-7/26

Kinetics and Mechanism of the Iodination of Aromatic Amino-
Sulphonic Acids in Aqueous Solutions.

is as follows:

$$-\frac{d(J)}{dt} = k_o(S^-)^2\frac{(J)}{J-} + k_p(S^-)^2 \frac{(J)}{(J-)}2 + k_o'(S^-)(HPO_4^{2-}) \frac{(J)}{(J-)}$$

$$+ k_p'(S^-)(HPO_4^{2-}) \frac{(J)}{(J-)}2$$

where S^- is the anion of the aminosulphonic acid, (J)
being the analytic concentration of iodine. The velocity
of iodination of N-ethyl-N-phenylbenzylamino-p-sulphonic
acid is expressed by a very simple formula where members
with the constants k_o and k_o' do not appear. Neutral salts
form negligible reaction accelerators. Values of the
relative velocities of iodination are given for the various
salts. Temperature coefficients for the salts of dimethyl-
and diethylaniline-m-sulphonic acids have increased values
at 10° C(4-5), for E-salts normal values (2.5 at 10° C.)
Temperatures of activisation are listed. Two variants
are given for the form of the transition complex: in one
case the anion of the salt (i.e. the base) enters the
compound of the iodising agent, in the second case the

Card 3/4

Kinetics and Mechanism of the Iodination of Aromatic Amino-   73-1-7/26
. Sulphonic Acids in Aqueous Solutions.

aminosulphonate ion (i.e. the base) appears as the
proton-acceptor. There are 10 graphs, 17 tables;
27 references, 6 of which are Slavic.
AVAILABLE: Library of Congress

Card 4/4

ACC NR: AP7013704   SOURCE CODE: UR/0292/67/000/002/0012/0014

AUTHOR: Kurakin, A. S. (Candidate of technical sciences); Annenkov, V. B.
(Engineer)

ORG: none

TITLE: Evenness of rotation of synchronous micromotors

SOURCE: Elektrotekhnika, no. 2, 1967, 12-14

TOPIC TAGS: electric motor, electric rotating equipment part, magnetic
field, miniature electric equipment

SUB CODE: 10

ABSTRACT: The smoothness of rotation of rotors of various types of synchronous
motors is investigated. The influence of ellipticity of the magnetic field,
the polarity of the motors, heterogenity in magnetic field over length of the
motor and curvature of the angular characteristic of the motor on evenness of
rotation speed is shown. Recommendations are given for the creation of preci-
sion synchronous motors. The evenness of rotation rate of synchronous motors
with permanent magnets can be increased by giving preference to multipole
designs with increased air gap, which provides for even distribution of the
field over the length of the motor, strict symmetry in the windings, high

Card 1/2   UDC: 621.313.13-181.4.001.5

0933 2164

ACC NR: AP7013704

specific synchronising moment and high influence on the operation of the motor
of the saw-tooth fields in stator and rotor. Of the existing types of motors,
the smoothest in rotation are synchronous reducing motors operating on the tooth
harmonics of the field. Orig. art. has: 8 figures, 5 formulas and 1 table.
[JPRS: 40,569]

Card 2/2

ACC NR: AP7007068   SOURCE CODE: UR/0292/66/000/011/0022/0027

AUTHOR: Kurakin, A. S. (Candidate of technical sciences); Yuferov, F. M. (Candidate of technical sciences)

ORG: none

TITLE: Reactive type synchronous reducer motor

SOURCE: Elektrotechnika, no. 11, 1966, 22-27

TOPIC TAGS: electric motor, vector analysis
SUB CODE: 09

ABSTRACT: A presentation of problems from the theory of synchronous reducer motors of reactive type. The theoretical conclusions are supported by experimental investigations on motors in various operating modes. Formulas are presented which are necessary for calculation of the operative and mechanical characteristics of the motors. The principle operation of the synchronous reducer motor is presented and its primary power relations are defined; the conversion plan and vector diagram of the motor are presented. The differentiating point of synchronous reducer motors is the presence of open grooves on the stator and rotor. Orig. art. has: 7 figures, 16 formulas and 1 table. [JPRS: 39,577]

Card 1/1   UDC: 621.313.323.001.1

KURAKIN, Aleksandr Sergeyevich, aspirant

Field in the air gap of a reduction motor. Izv.vys.ucheb.zav.;
elektromekh. 6 no.2:181-192 '63.   (MIRA 16:4)

1. Kafedra elektricheskikh mashin Moskovskogo energeticheskogo
instituta.

(Electric motors)

KURAKIN, Aleksandr Sergeyevich, aspirant; YUFEROV, Fodor Mikhaylovich, kand. tekhn. nauk, dotsent

Principles of the operation of reducer motors. Izv. vys. ucheb. zav.; elektromekh. 7 no.2:193-208 '64. (MIRA 17:4)

1. Kafedra elektricheskikh mashin Moskovskogo energeticheskogo instituta.

GLUKHOV, V.I.; KURAKIN, A.T.; ZHERDETSKAYA, N.N., red.; REYZMAN, Ye.Ya.,
    tekhn.red.

[Techniques of sound recording for motion-picture films;
experience of amateur motion-picture photographers] Tekhnika
ozvuchaniia fil'ma; iz opyta raboty kinoliubitelei. Moskva, Gos.
izd-vo "Iskusstvo", 1960. 85 p.   (MIRA 13:4)
                (Motion pictures, Talking)

ANDREYEV, G.S., kand. tekhn. nauk; BOKUCHAVA, G.V., kand. tekhn. nauk,
    dots.; BRAKHMAN, L.A., inzh.; BUDNIKOVA, A.V., inzh.; GORDON,
    M.B., kand. tekhn. nauk, dots.; ZHAVORONKOV, V.N., inzh.;
    KARZHAVINA, T.V., kand. tekhn. nauk; KOROTKOVA, V.G., inzh.;
    KORCHAK, S.N., inzh.; KLUSHIN, M.I., kand. tekhn. nauk, dots.;
    KUZNETSOV, A.P., kand. tekhn. nauk, dots.; KURAKIN, A.V., inzh.;
    LATYSHEV, V.N., inzh.; OL'KHOVSKIY, V.N., inzh.; ORLOV, B.M.,
    kand. tekhn. nauk, dots.; OSHER, R.N., inzh.; PODGORKOV, V.V.,
    inzh.; ; SIL'VESTROV, V.D., kand. tekhn. nauk [deceased];
    TIKHONOV, V.M., inzh.; TROITSKAYA, D.N., inzh.; KHRUL'KOV, V.A.,
    inzh.; LESNICHENKO, I.I., red. izd-va; SOKOLOVA, T.F., tekhn.
    red.; GORDEYEVA, L.P., tekhn. red.

[Lubricating and cooling fluids and their use in cutting metals]
Smazochno-okhlazhdaiushchie zhidkosti pri rezanii metallov i
tekhnika ikh primeneniia. Moskva, Gos. nauchno-tekhn. izd-vo
mashinostroit. lit-ry, 1961. 291 p.   (MIRA 15:1)
            (Metalworking lubricants)

(A)   L   12916-66   EWT(m)/EWA(d)/T   DJ

ACC NR: AP6000962

SOURCE CODE: UR/0286/65/000/022/0043/0043

AUTHOR: Kurakin, A. V.

ORG: none

30
(B)

TITLE: Cooling-lubricating liquid AVK-2. Class 23, No. 176353

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965, 43

TOPIC TAGS: lubricant, coolant, soap, sodium compound, boric acid / AVK 2 lubricant

ABSTRACT: This Author Certificate presents the cooling-lubricating liquid AVK-2 for cold machining of metals. This material is based on soap, sodium nitrite, and soda calcined in water. To improve the quality of the cooling-lubricating liquid, its composition includes boric acid and tri-ethanol amine soap of oleic acid. To increase the wetting property of the liquid, a surface-active substance (noniono-genic) is added to its composition.

SUB CODE: 11/ SUBM DATE: 16Mar64

Card 1/1 HW

UDC: 621.892.6:621.7.016.3

KURAKIN, K.A. (Moskva).

Synthesis of linear servosystems using the criterion of minimum
of practically critical reproduction error [with summary in
English]. Avtom. i telem. 18 no.5:409-426 My '57.   (MLRA 10:8)
(Servomechanisms)

L 46172-66   EWT(m)/EWP(j)   IJP(c)   DJ/HM
ACC NR: AP6021204   (A)   SOURCE CODE: UR/0138/66/000/003/0016/0018

AUTHOR: Epshteyn, V. G.; Vasil'yev, G. Ya.; Serov, I. A.; Kurakin, K. A.; Lyapina, L. A.; Polyak, M. A.   37

ORG: Yaroslavl Technological Institute (Yaroslavskiy tekhnologicheskiy institut)

TITLE: New type of softener with an aromatic base

SOURCE: Kauchuk i rezina, no. 3, 1966, 16-18

TOPIC TAGS: rubber chemical, petroleum product, plasticizer

ABSTRACT: In order to broaden the source of raw materials for the rubber industry, an extract named "azaroplast" (Azerbaydzhan aromatic plasticizer), obtained from the furfural purification of lubricating oils of Baku crudes, was tested as a softener. Azaroplast was tested in comparison with other commonly used softeners in standard mixes based on NK natural rubber and butadiene-styrene SKS-30ARK rubber and in a tread mix consisting of 70% SKS-30ARK and 30% NK. The tests showed azaroplast to surpass the other softeners in plasticizing effect. The vulcanization rate of mixes containing azaroplast was practically the same as that of mixes with the other softeners. Vulcanizates of standard mixes based on NK and SKS-30ARK and containing azaroplast had increased strength characteristics. Replacement of mazut with azaroplast in tread mixes will permit a considerable increase in the extrusion rate and produce higher strength

Card 1/2   UDC: 678.049.37.004.12

ACC NR: AP6021204

characteristics.   Orig. art. has: 3 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: 07Oct64/ ORIG REF: 004/ OTH REF: 002

Card 2/2

KURAKIN, K.I.

Dep Min of Communications Equipment Ind (c-1951-)

Radio

"The Soviet Radio Industry in 1951,"Radio No 5, 1951

PA 182T106

KURASHIN, K.I.

K voprosu o kachestve slediashchikh sistem i sistem avtomaticheskogo regul-
irovaniia. (Avtomatika i telemekhanika, 1951, v. 12, no. 2, p. 97-122,
diagrs., bibliography)

Title tr.: Characteristics of follow-up and automatic control systems.

TJ213.A453 1951

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of
Congress, 1955

KURAKIN, K.I.

Physics

"Problem Concerning the Quality of Follower Systems and Automatic Regulation Systems",
Avtomat. i Telemekh., 12, No. 2, 1951

PA 187T73

KURAKIN, K. I.

"Selection of Optimum Characteristics of Linear Follow-Up Systems (I)",
Avtomatika i Telemekhanika, Vol 14, No 4, 1953, pp 392-402.

Determine the optimum transfer function of a linear follow-up system
based on the criterion of the minimum least-square error for a case when
the disturbance is distributed uniformly over the entire spectrum of the
operating frequencies, and the reproducible quantity is a stationary random
function.

It is demonstrated that the optimum of a follow-up system is obtained
with astatism of the first order. Bibliography, 9 titles. (RZhMekh,
No 11, 1954) SO: Sum No. 443, 5 Apr. 55

KURAKIN, .K.I.

"Introduction to the statistical dynamics of automatic control systems"
by V.V.Solodovnikov, Reviewed by K.I. Kurakin. Avtom. i telem. 14 no.4:
472-475 Jl-Ag '53.   (MLRA 10:3)
(Automatic control)
(Kurakin, K.I.)

KURAKIN, K. I.
    PETROV, B.N.; TSYPKIN, Ya. Z.; KURAKIN, K.I.; TIKHONOV, V.I.; SIVITSYN, A.S.

    Resolutions of the committee selected by the seminar on the theory
    of automatic control after discussing. V. V. Solodovnikov's book
    "Introduction to the statistical dynamics of automatic control systems".
    Avtom. i telem. 14 no.4:477 Jl-Ag '53.   (MIRA 10:3)
              (Automatic control)

KURAKIN, K.I.

SUBJECT   USSR/MATHEMATICS/Theory of probability   CARD 1/2   PG - 557
AUTHOR   KURAKIN K.I.
TITLE   On the choice of the optimal characteristic linear differentiators
             in automatic control systems.
PERIODICAL   Avtomat. Telemech. 16, 293-299 (1955)
             reviewed 1/1957

The following problems of the servomechanisms are considered: 1) The (in the
sense of Wiener) optimal transferring function of a differentiator is de-
termined in the case when the entrance function has the form $\beta_1(t) + \beta_n(t)$

(entrance function + component of disturbance), where $\beta_1(t)$ and $\beta_n(t)$ both

are stationary stochastic processes and $\beta_1(t)$ has an expectation value zero,

$\beta_n(t)$ has a constant spectral density; furthermore $\beta_1(t)$ has a spectral
density of the type $A/\omega^2(a^2 + \omega^2)$ (A, a const.). The mean quadratic error
which occurs by producing the derivatives is computed too. 2) The optimal
transferring function is computed for a system which is suitable for the
simultaneous representation of the entrance function and its derivatives,
provided that the spectral density of the derivatives of the entrance function
has the form

$$A/\omega^2(a^2 + \omega^2)(b^2 + \omega^2) \qquad (A, a, b \text{ const.})$$

Avtomat. Telemech. 16, 293-299 (1955)   CARD 2/2   PG - 557

and that of the disturbance is constant again.- The author proves that the
optimal differentiation in essential can always be reduced to a problem
of the optimal filtration.

AUTHOR: Kurakin, K. I.

TITLE: Quality Criteria and Their Application to the Selection of Optimal
             Characteristics of Linear Automatic-control Systems (Kriterii
             kachestva i ikh primeneniye pri vybore optimal'nykh kharakteristik
             lineynykh sistem avtomaticheskogo regulirovaniya)

PERIODICAL: Tr. 2-go Vses. soveshchaniya po teorii avtomaticheskogo
             regulirovaniya. Vol 2, Moscow-Leningrad, Izd-vo AN SSSR, 1955,
             pp 442-456

ABSTRACT: Based on the least mean-square reproduction error, optimum
             transfer functions for a system of differentiation, tracking, etc.,
             are determined for one case of a random input signal and noise.
             A relationship is given between the system's error coefficients
             and its normal reaction per unit input jump. Included is a compari-
             son of the least-mean-square reproduction-error criterion with the
             integral quality criteria for servo systems.
                                                         V. V. Solodovnikov

Card 1/1

KURAKIN, K.I., (Moskva)

Selection of optimum characteristics of linear servo-systems.
Part 2. Avtom. i. telem. 17 no.7:648-663 Jl '56.   (MLRA 9:10)

(Servomechanisms)

PA - 3227

AUTHOR   KURAKIN K.I.
TITLE   The Synthesis of Linear Servosystems Using the Criterion of
            Minimum of Practically Critical Reproduction Error.
            (Sintez lineynykh sledyashchikh sistem na osnove kriteriya
            minimuma prakticheski predel'noy oshibki vosproizvedeniya.-
            Russian.)
PERIODICAL Avtomatika i Telemekhanika 1957, Vol 18, Nr 5, pp 409-426
            (USSR)
            Received: 6/1957   Reviewed: 7/1957
ABSTRACT   The paper under review describes a method for determining
            an optimal function of the transmission for a supervisory
            system with parameters that are constant with respect to
            time. This method represents a further development of a
            method described by the same author in Avtomatika i
            Telemekhanika 1953, Vol 14, Nr 4, namely for the case
            where the subsequently formed initial quantity is a given
            slowly varying function and where perturbations are evenly
            distributed over the entire spectrum of the operation
            frequencies. The further development of that method is based

CARD 1/2

The Synthesis of Linear Servosystems Using the Criterion of   PA - 3227
Minimum of Practically Critical Reproduction Error.

on the application of the criterion for the minimum of the
practical boundary error of the subsequent formation; this
criterion was described by the same author in Avtomatika i
Telemekhanika 1951, Vol 12, Nr 2. The paper under review
contains general formulae for the determination of the error
coefficients, of the amplitude characteristics, and of the
phase-frequency characteristics, of the stability reserve in
the phase, of the normal reaction to a jumplike initial
signal, and of other dynamic characteristics of an optimal
supervisory system. Methods are given for purpose of
realization of optimal functions of transmission for a
supervisory system with the aid of correcting installtions
operating with direct current.
(10 reproductions, 5 Slavic references.)

ASSOCIATION: not given.
PRESENTED BY: -
SUBMITTED: 13. April 1955.
AVAILABLE: Library of Congress.

CARD 2/2

AUTHOR: Kurakin, K. I. (Moscow)   103-19-5-3/14

TITLE: An Analytical Method of Synthesis of Linear Control
            Systems in the Presence of Disturbances and a Given
            Dynamic Precision (Analiticheskiy metod sinteza lineynykh
            sistem avtomaticheskogo upravleniya pri nalichii pomekh i
            zadannoy dinamicheskoy tochnosti)

PERIODICAL: Avtomatika i Telemekhanika, 1958, Vol. 19, Nr 5,
            pp. 408-417 (USSR)

ABSTRACT: The problem is solved here in which manner, starting
            from the optimum but generally speaking non-realizable
            characteristics obtained in reference to the physically
            realizable characteristics as little as possible devia-
            ting from the optimum ones can be determined. The formula
            (7) for the total error of control is derived. The last
            term of the sum in (7) determines the systematic error of
            control. Then the optimum characteristics of control are
            determined. Equation (17) is derived. The solution of
            this equation shows that the transmission function of a
Card 1/3   closed control system depends on p and e^{-pT}. This leads

An Analytical Method of Synthesis of Linear   103-19-5-3/14
Control Systems in the Presence of Disturbances and
a Given Dynamic Precision

to the fact that the frequency characteristics correspon-
ding to the function contain undamped oscillation compo-
nents. In contrast to reference 14 an analytical method
of approximation not of frequency characteristics but of
a direct approximation of the transmission function:
$K(p, e^{-pT})$ is suggested here. In order to obtain the
function $K(p)$ in a rational form, e^{-pT} is approximated
with the aid of the rational Pade-function (Reference 16).
The approximation of the transcendental function e^{-pT}
with the aid of the rational Pade-function guarantees the
obtaining of the optimum transmission functions for the
automatic control systems (which were determined in referen-
ces 1o and 14) directly in a form usable in practice. Two
examples for the employment of the described method are
given. They show the practical usability of the method
for the solution of problems for optimum conditions in the
presence of disturbances and given requirements regarding
the dynamic precision.

Card 2/3   There are 1 figure 16 references, 1o of which are Soviet.

An Analytical Method of Synthesis of Linear   103-17-5-3/14
Control Systems in the Presence of Disturbances and
a Given Dynamic Precision

SUBMITTED: March 26, 1957

AVAILABLE: Library of Congress

               1. Mathematical computers—Control   2. Mathematical computers
               —Operation

Card 3/3

66030 64630

8.2000

S/119/60/000/05/005/01
B014/B007

AUTHOR: Kurakin, K. I., Candidate of
            Technical Sciences

TITLE: An Instrument for Recording the Amplitude- and Phase-
            Frequency Characteristics

PERIODICAL: Priborostroyeniye, 1960, Nr 5, pp 10-12 (USSR)

TEXT: The author first discusses the instrument produced for the purpose q
of recording the frequency characteristics of automatic regulating systems
by a collective under the supervision of V. B. Ushakov (Ref 1). This in-
strument consists of a generator for low-frequency sinusoidal oscillations,
an ultra-low-frequency phase- and frequency meter, a peak-reading volt-
meter, a compensation rectifier, and an electronically stabilized current
source. Further, a universal indicator, which is supplied by the first of
the indicators, and whose circuit is show in figure 1, is discussed.
The main subject of the present paper is the description of a test instru-
ment developed by the author (Ref 2), which is designed for recording the
amplitude- and phase-frequency characteristic. As may be seen from the block
diagram shown in figure 2, the instrument consists of a voltage generator
for modulated and non-modulated alternating voltages within the frequency

Card 1/2

An Instrument for Recording the Amplitude- and
Phase-Frequency Characteristic

66636 69620

S/119/60/000/005/005/01?
B014/B007

range of from 0 to 10 c, of a measuring instrument for the phase shift and
the amplitude ratio at the in- and output of the device to be tested. The
modulated sinusoidal input signals are obtained from two selsyns. Measure-
ment of the phase and the amplitude ratio is carried out visually on the
fluorescent screen of a cathode ray tube on which Lissajous figures are
observed. The instrument permits the easy determination of the characteris-
tic of linear automatic regulating systems and may be used not only in
scientific research organizations but also under conditions of industrial
work. There are 5 figures and 5 references, 4 of which are Soviet.

X

Card 2/2

KURAKIN, K.I.

Semiconductor summing a.c.amplifier. Priborostroenie no.7:6-7 Jl '62.
(MIRA 15:7)
(Amplifiers (Electronics))

9.2530

S/119/62/000/011/001/002
D201/0308

AUTHOR: Kurakin, A.I.

TITLE: A magnetic-semiconductor servo-amplifier for follow-
                 up systems with a two-phase induction motor

PERIODICAL: Priborostroyeniye, no. 11, 1962, 15-18

TEXT: The servo-amplifier consists of a 400 c/s transistor-
ized pre-amplifier and a fast operating two-stage half-wave bridge-
type magnetic amplifier with flexible positive and negative D.C.
feedback. The types of magnetic materials, transistors and trans-
formers are given. The circuit diagram and the operation of the unit
is discussed. The expression for the overall transfer function for
the unit is derived under the assumption that the transistorized
pre-amplifier is inertialess and linear. The servo-amplifier is
suitable for use in low-power internal follow-up systems with A.C.
pick-ups provided a signal limiting stage is incorporated at the
pre-amplifier input to avoid sharp decreases of the load voltage,
inherent in the control of bridge-type half-wave magnetic amplifiers.
There are 5 figures.
Card 1/1

KURAKIN, K.I., kand.tekhn.nauk

"Design of discrete control systems" by L.T.Kuzin. Reviewed by
K.I.Kurakin. Priborostroenie no.1:30-31 Ja '63. (MIRA 16:2)
(Automatic control)
(Kuzin, L.T.)

L 15512-63   EDS

ACCESSION NR: AP3006402   S/0119/63/000/008/0018/0020

AUTHOR: Kurakin, K. I.

48

TITLE: Improved electromechanical a-c integrator $_{10}$

SOURCE: Priborostroyeniye, no. 8, 1963, 18-20

TOPIC TAGS: electromechanical ac integrator, integrating circuit, integrating network, integrator, integrating error, integrating servosystem, digital computer integrator, asynchronous tachogenerator

ABSTRACT: The dynamic accuracy of an improved electromechanical servo a-c integrator (functional diagram shown in Fig. 1 of the Enclosure) is analyzed. Rotary sine-cosine control transformer M_1 serves as the input element. The stator winding of M_1 is energized by 400-cps ac from a velocity transducer installed on a moving body. Induction tachogenerator M_2 serves as the final control member of the servosystem and is coupled with actuating two-phase motor M_3. A compensator consisting of R_1, R_2, R_3, and C_1 and voltage dividers R_5 and R_5 is used for controlling the quadrature voltage of M_2. The error signal is applied through transformer Tr_3 to transistorized servoamplifier a. The input of Tr_3 is provided with an error signal voltage limiter which consists of

Card 1/3 2

L 15512-63

ACCESSION NR: AP3006402

O

silicon junction diodes D_1 and D_2. In order to eliminate quadrature voltage
which may appear under various climatic conditions the servoamplifier is pro-
vided with an automatic compensator, designed as a quadrature-voltage negative
feedback. According to experimental data the relative error of the integrator
did not exceed +0.2% in the temperature range from -10 to +40C. Integrator
sensitivity, which corresponds to the maximum velocity, is not less than ±1
angular minute. Backlash in the gears between the motor and tachogenerator was
within 10—15 angular minutes. The speed control factor was at least 5000.
Orig. art. has: 4 figures and 10 formulas.

ASSOCIATION: none

SUBMITTED: 00   DATE ACQ: 23Sep63   ENCL: 01

SUB CODE: GE   NO REF SOV: 000   OTHER: 000

Card 2/2

[drive systems with low power ratings; their theory,
design and adjustment with consideration of the carrier
frequency] Steilsomatic sistory anlal mechanosmi; tem-
lity, mantet i roitodka g i h t u irm likez sharvay.
lokty, Bodiunuth or ty trn, 465 p. (NIU 3711)

ACC NR: AM6004542   Monograph   UR/

Kurakin, Kapiton Ivanovich

Low-power servosystems; theory, design and tuning taking carrier frequency into
account   (Sledyashchiye sistemy maloy moshchnosti; teoriya, raschet i nastroyka
s uchetom nesushchey chastoty) Moscow,   Izd-vo "Mashinostroyeniye",   65.
0402 p. illus., biblio. Errata slip inserted. 8,000 copies printed.

TOPIC TAGS: servosystem, alternating current, carrier frequency, phase detector

PURPOSE AND COVERAGE: The book presents methods of the theory, design and tuning of
low-power servosystems, operating on an alternating current. A detailed analysis
and synthesis of the correcting devices of alternating current is presented, and
passive correcting circuits with phase-sensitive synchronous detection are examined.
Statistical methods of the synthesis of servo-systems in the presence of interferen-
ces and a fixed dynamic accuracy are dealt with extensively. The book is intended
for scientific workers, builders and engineers working on the design and manu-
facture of servosystems, and can also be useful for students of higher technical
schools and aspirants of the corresponding specialties.

TABLE OF CONTENTS (abridged):

Card 1/2   UDC: 629.13:62-503.23

ACC NR: AP6004542

Ch. II.   Principle types of servosystems and their operational characteristics --44
Ch. III. Principles theories of sevosystems of alternating current   --103
Ch. IV.   Analysis and synthesis of correcting devices of alternating current --201
Ch. V.   Analysis and synthesis of correcting devices of alternating current
          servosystems and their design   -233
Ch. VI.   Statistical methods of the synthesis of servosystems in the presence of
          interferences and a fixed dynamic accuracy   -291
Ch. VII. Experimental methods of optimum tuning of servosystems   --379

SUB CODE: 09   /SUBM DATE: 21Feb65/ ORIG REF: 053/ OTH REF: 048

Card 2/2

KURAKIN, L. A.

"Circuits for Obtaining a Sawtooth Current for a Horizontal Ray Deflection in Television Cathode-Ray Tubes." Cand Tech Sci, Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov, Min Higher Education USSR, Moscow, 1955. (KL, No 18, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

6(6) SOV/112-59-1-1935

AUTHOR: Kurakin, L. A.

TITLE: Linearization of the Deflecting Current in a Vertical TV Sweep

ABSTRACT: From analysis of an equivalent circuit of a vertical-sweep output anode circuit, a relationship between the tube and deflecting-coil currents is drawn. The minimum average-current value determines the most economical conditions. It can be attained when the inductance of the anode winding of a vertical-sweep transformer is $\dfrac{RT}{2\sqrt{3}}$, where R is the resistance of the output winding and the vertical-sweep coils reduced to anode-circuit terms, and T is the time of the vertical-sweep forward swing. To attain the desired linearity, the output-tube control voltage must appreciably differ from linear. The distortion needed can be achieved by special fourpoles or by using a frequency-

Card 1/2

SOV/112-59-1-1935

Linearization of the Deflecting Current in a Vertical TV Sweep

selective feedback. A feedback by means of an additional winding of the output vertical transformer is considered. The conditions for best linearity are cited.

I.S.Z.

Card 2/2

MILLER, Viktor Aleksandrovich; KURAKIN, Lev Anatol'yevich; GERUS,
V.L., red.; LARIONOV, G.Ye., tekhn. red.

[Electron-beam receiving tubes; their properties and para-
meters] Priemnye elektronno-luchevye trubki (svoistva i
parametry). Moskva, Izd-vo "Energiia," 1964. 367 p.
(MIRA 17:2)

BUTUZOVA, K., strakhovoy delegat, tokar', udarnik kommunisticheskogo truda
(Kalinin); KURAKIN, M., strakhovoy delegat, strogal'shchik (Kalinin)

What one can't do, all together master. Okhr.truda i sots.
strakh. 5 no.10:20-21 O '62.   (MIRA 15:11)
                (Railroads—Cars—Construction)
                (Kalinin—Industrial hygiene)

ANESH, I.F., inzh.   KURAKIN, 4.G., tekhnik

Power takeoff from 35 kv. lines for the power supply of repair
stations. Energetik no.9:29-30 S '64.   (MIRA 17:10)

ANESH, I.P., inzh. (g. Orenburg); KURAKIN, M.G., tekhnik (g. Orenburg)

Assembling of a composite 35/10 kv. transformer substation.
Energetik 13 no.8:19-20 Ag '65.   (MIRA 18:9)